

In the Claims:

1 1. (Currently amended) A vertical lift system for transporting
2 a receptacle (3) from one deck to another deck,
3 ~~particularly in a passenger aircraft,~~ said vertical lift
4 system comprising a vertically extending stationary lift
5 shaft (5, 6), a vertical lift (71) movable up and down in
6 said stationary lift shaft, at least one stationary
7 activating member (12) mounted in a fixed position in said
8 stationary lift shaft, a number of gripper mechanisms (7)
9 secured to said vertical lift (71) for gripping said
10 receptacle, a number of latch elements (9) secured to said
11 receptacle (3) in positions for engagement with said
12 gripper mechanisms (7), guides (3A, 115) for aligning said
13 gripper mechanisms (7) with said latch elements (9) in said
14 positions for engagement, each gripper mechanism (7)
15 comprising a lifting hook (10) for engaging a respective
16 latch element (9) of said latch elements (9), ~~[[and]]~~ a
17 locking pawl (11) for locking said lifting hook in a latch
18 element engaging position, and a mechanical coupling
19 operatively interposed between said lifting hook (10) and
20 said locking pawl (11) for automatically coupling and
21 decoupling ~~coupling~~ said locking pawl (11) and said lifting
22 hook (10) in response to a movement direction and an
23 instantaneous position of said vertical lift (71) relative
24 to said receptacle (3) and relative to said stationary
25 activating member (12) with each other for holding said
26 lifting hook (10) in a latched position against forces

tending to unhook said lifting hook (10) when said vertical lift (71) moves said receptacle (3) up or down, wherein said lifting hook (10) holds said receptacle (3) against horizontal forces, and wherein said locking pawl (11) holds said receptacle (3) against vertical forces.

2. (Original) The vertical lift system of claim 1, wherein said latch elements (9) are secured to side walls of said receptacle (3) at upper corner or edge areas of said receptacle.

3. (Original) The vertical lift system of claim 1, wherein said latch elements (9) are recessed in upper corner or edge areas of side walls of said receptacle (3).

4. (Currently amended) The vertical lift system of claim 1, wherein said locking pawl (11) comprises a cam track (113), and wherein said ~~vertical lift system comprises a~~ stationary activating member (12) is mounted in ~~[[a]]~~ said fixed position for engaging said cam track (113) of said locking pawl when said vertical lift is reaching an unlocking position, whereby said cam track (113) engages said stationary activating member (12) thereby moving along said stationary activating member (12), said locking pawl (11) comprising a latching arm (111) engaging an upper edge portion (31A) of said receptacle (3) when said cam track (113) is disengaged from said stationary activating member (12), and wherein said latching arm (111) is disengaged

from said upper edge portion (31A) when said cam track (113) engages said stationary activating member (12) for preparing a release of said lifting hook (10).

5. (Currently amended) The vertical lift system of claim 1, ~~further comprising a~~ wherein one of said guides (115) is a stationary guide member (115) mounted in said stationary lift shaft (5, 6) in a position for guiding said locking pawl (11) when said vertical lift is moving, said stationary guide member (115) holding said locking pawl (11) in a locked position when said vertical lift is moving.

6. (Currently amended) The vertical lift system of claim 1, wherein said mechanical coupling comprises an entraining element (101) on said lifting hook (10) and a contact arm (114) on said locking pawl (11) for engaging said entraining element (101) when said locking pawl (11) is moved by said stationary activating member (12) into a position for automatically disengaging said lifting hook (10) from its latch element (9) of said latch elements.

7. (Currently amended) The vertical lift system of claim 6, wherein said entraining element (101) is part of said lifting hook (10) and wherein said contact arm (114) is part of said locking pawl (11), and wherein said ~~lift system further comprising a~~ stationary activating member (12) is positioned for activating said locking pawl (11) to

engage said contact arm (114) of said locking pawl (11) with said entraining element (101) of said lifting hook (10) ~~[[for]]~~ thereby disengaging said lifting hook (10) from said respective latch (9).

8. (Currently amended) The vertical lift system of claim 1, further comprising a first biasing reset (141) operatively connected to said locking pawl (11) and a second biasing reset (142) operatively connected to said lifting hook (10), said first and second biasing resets (141, 142) normally biasing said locking pawl (11) and said lifting hook (10) with a biasing force into a receptacle engaging position, ~~said vertical lift further comprising a~~ and wherein said locking pawl (11) comprises a cam track (113) with a cam configuration for enabling said stationary activating member (12) ~~positioned for disengaging to~~ disengage said locking pawl (11) from said lifting hook (10) when said receptacle is to be released from said gripper mechanisms ~~[[(+7)+7]]~~ (7) against said biasing force.

9. (Original) The vertical lift system of claim 8, wherein said first and second biasing resets (141, 142) comprise springs for exerting said biasing force.

10. (Original) The vertical lift system of claim 1, wherein each latch element of said latch elements (9) comprises a hook engagement guide ramp (93) and a latch recess (92) below said hook engagement guide ramp (93), and wherein

each lifting hook (10) has a claw (103) at its free hook end, said claw (103) having a claw tip for engaging said latch recess (22), whereby a downward motion of said vertical lift (71) causes said claw (103) to ride down along said hook engagement guide ramp (93), said system further comprising a biasing member (142) effective on said lifting hook (10) for keeping said claw (103) engaged with said hook engagement guide ramp (93) when said claw is riding along said hook engagement guide ramp (93) and for biasing said claw (103) of said lifting hook (10) into engagement with said latch recess (92) of said latch element (9) when said claw (103) slides off said hook engagement guide ramp (93).

11. (Currently amended) The vertical lift system of claim 1, wherein each of said latch elements (9) comprises a latch recess (92) and a hook disengagement guide ramp (91) below said latch recess (92), ~~[[and]]~~ wherein each lifting hook (10) has a claw (103) at its free hook end, said claw (103) riding along said hook disengagement guide ramp (91) in response to a further downward motion of said vertical lift (71) following a hook and latch engagement, for disengaging said lifting hook (10) from its latch element (9), ~~said system further comprising a~~ and wherein said stationary activating member (12) is positioned for rotating said lifting hook (10) with its claw (103) out of said latch engagement against a biasing force (141).

1 12. (Original) The vertical lift system of claim 1, further
2 comprising an indicator (I, P) for showing vertical
3 positions of at least one of said gripper mechanisms
4 relative to a fixed scale (I).

1 13. (Original) The vertical lift system of claim 1, wherein
2 said receptacle (3) comprises an upwardly facing edge
3 portion (31A), wherein said locking pawl (11) comprises a
4 downwardly facing arm (111) having a free end (11A) for
5 engaging said upwardly facing edge portion (31A) when said
6 receptacle is latched to said gripper mechanism (7),
7 wherein each latch element (9) has a recess (92) with a
8 downwardly facing surface, and wherein said lifting hook
9 (10) has a claw (103) with an upwardly facing surface for
10 engaging said downwardly facing surface of said recess (92)
11 when said receptacle (3) is latched to said gripper
12 mechanism, whereby a receptacle edge is clamped between
13 said free end (11A) and said claw (103).

1 14. (Original) The vertical lift system of claim 13, wherein
2 said upwardly facing edge portion (31A) is attached to one
3 side of a corner of said receptacle (3) and wherein said
4 latch element (9) is attached to the other side of the same
5 corner of said receptacle (3).

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